WHAT IS CLAIMED IS:

1. A method for forming a cylindrical body utilizing a continuous weld, said method comprising:

feeding a source material including a first edge and a second edge from a coil;

offsetting at least one of the first edge and the second edge;

spiraling the material to form a cylinder;

welding the first edge and the second edge together forming a continuous weld; and

cutting the cylinder to a selected length.

2. A method according to Claim 1 wherein said offsetting further comprises offsetting at least one of the first edge and the second edge utilizing a joggle joint die.

3. A method according to Claim 1 wherein said spiraling the material further comprises:

monitoring a gap width between the first edge and the second edge; and

adjusting a helix angle such that the gap width is substantially uniform.

4. A method according to Claim 1 wherein said welding further comprises welding at least one of an inner fillet weld, an inner butt weld, an outer fillet weld, and an outer butt weld.

5. A method according to Claim 4 wherein said welding further comprises vacuuming loose flux from the weld.

6. A method according to Claim 4 wherein said further comprises:

tracking a seam utilizing a seam tracker; and

transmitting a weld location to a controller controlling an automatic submerged arc welder.

7. A method according to Claim 1 wherein said cutting the cylinder further comprises cutting the cylinder with a plasma cutter in a plane normal to the cylinder.

8. A method according to Claim 1 wherein said feeding a source material further comprises feeding a flexible source material including a first edge and a second edge from a coil, said welding further comprises welding the first edge and second edge together forming a continuous weld such that the cylinder is deformable.

9. A method according to Claim 1 further comprising scraping hardened flux from the weld.

10. A method according to Claim 1 further comprising straightening at least a portion of the material.

11. A system for forming a cylindrical body using a continuous weld, said system comprising:

at least one drive roller configured to drive a material;

a splicing assembly in series configuration with said drive roller, said splicing assembly configured to splice a rear end of a first coil to a front end of a second coil;

an offsetter in series configuration with said drive roller, said offsetter configured to offset at least one of a first edge and a second edge of the material;

a spiral welder in series configuration with said drive roller, said spiral welder configured to spirally weld the material into a cylinder;

a cylinder fixture in series configuration with said drive roller, said cylinder fixture configured to support and transport the cylinder; and

a cutter in series configuration with said drive roller, said cutter configured to cut the cylinder to a selected length.

12. A system according to Claim 11 wherein said offsetter comprises a joggle joint offsetter.

13. A system according to Claim 11 wherein said splicing assembly comprises:

a plasma torch; and

a clamp welder in series configuration with said plasma torch.

14. A system according to Claim 11 wherein said spiral welder comprises a seam tracker.

15. A system according to Claim 14 wherein said spiral welder configured to weld at least one of an inner fillet weld, an inner butt weld, an outer fillet weld, and an outer butt weld.

16. A system according to Claim 15 wherein said spiral welder comprises a vacuum configured to vacuum loose flux from the weld.

17. A system according to Claim 11 wherein said spiral welder further comprises a scraper configured to scrape hardened flux from the weld.

18. A system according to Claim 12 further comprising a pivoting mounting surface, said peeler, said straightener, said drive roller, said offsetter, and said splicing assembly mounted on said mounting surface, said mounting surface configured to be remotely pivoted to control a gap width between said first edge and said second edge.

19. A system according to Claim 11 wherein said cutter further configured to cut the cylinder in a plane normal to the cylinder.

20. A system according to Claim 11 further comprising:

a peeler in series configuration with said drive roller, said peeler configured to prevent a coil of material from freely unwrapping; and

a straightener in series configuration with said drive roller, said straightener configured to straighten at least a portion of the material.

21. A system according to Claim 14 further comprising:

an automatic arc welder in series configuration with said seam tracker; and

a controller in electrical communication with said arc welder and said seam tracker, said controller configured to receive positioning signals from said seam tracker, said controller further configured to control said arc welder.

22. A method for fabricating a jacket for a tank car utilizing a continuous weld, said method comprising:

feeding a source material including a first edge and a second edge from a coil;

offsetting at least one of the first edge and the second edge;

spiraling the material to form a cylinder;

welding the first edge and second edge together forming a continuous weld;

cutting the cylinder to a selected length;

cutting the cylinder longitudinally; and

cutting at least one cutout.

23. A method according to Claim 22 wherein said offsetting further comprises offsetting at least one of the first edge and the second edge utilizing a joggle joint die.

24. A method according to Claim 22 wherein said spiraling the material further comprises:

monitoring a gap width between the first edge and the second edge; and

adjusting a helix angle such that the gap width is substantially uniform.

25. A method according to Claim 22 wherein said welding further comprises vacuuming loose flux from the weld.

26. A method according to Claim 22 wherein said welding further comprises:

tracking the weld utilizing a seam tracker; and

transmitting a weld location to a controller controlling an automatic submerged arc welder.

27. A method according to Claim 22 wherein said welding further comprises welding the first edge and second edge together forming a continuous outer fillet weld.

28. A method according to Claim 22 wherein said cutting the cylinder further comprises cutting the cylinder with a plasma cutter in a plane normal to the cylinder.

29. A method according to Claim 22 wherein said feeding a source material further comprises feeding a flexible source material including a first edge and

a second edge from a coil, said welding further comprises welding the first edge and second edge together forming a continuous weld such that the cylinder is deformable.

30. A method according to Claim 22 further comprising painting an entire interior surface except for an approximately three foot wide longitudinal strip in a bottom portion of the cylinder.

31. A method according to Claim 22 wherein said cutting the cylinder further comprises cutting the cylinder longitudinal from an outside surface utilizing an automated plasma torch traversing a path underneath the cylinder.

32. A method according to Claim 22 further comprising scraping hardened flux from the weld.

33. A method according to Claim 22 further comprising straightening at least a portion of the material.

34. A system for forming a jacket for a tank car using a continuous weld, said system comprising:

at least one drive roller configured to drive a material;

a splicing assembly in series configuration with said drive roller, said splicing assembly configured to splice a rear end of a first coil to a front end of a second coil;

an offsetter in series configuration with said drive roller, said offsetter configured to offset at least one of a first edge and a second edge of the material;

a spiral welder in series configuration with said drive roller, said spiral welder configured to spirally weld the material into a cylinder;

a cylinder fixture in series configuration with said drive roller, said cylinder fixture configured to support and transport the cylinder;

a first cutter in series configuration with said drive roller, said first cutter configured to cut the cylinder to a selected length; and

a second cutter in series configuration with said drive roller, said second cutter configured to longitudinally cut the cylinder.

35. A system according to Claim 34 wherein said offsetter comprises a joggle joint offsetter.

36. A system according to Claim 34 wherein said splicing assembly comprises:

a plasma torch; and

a clamp welder in series configuration with said plasma torch.

37. A system according to Claim 34 wherein said spiral welder comprises a seam tracker.

38. A system according to Claim 34 wherein said spiral welder comprises a vacuum configured to vacuum loose flux from the weld.

39. A system according to Claim 34 wherein said spiral welder further configured to configured to spirally outer fillet weld the material into a cylinder.

40. A system according to Claim 34 wherein said spiral welder further comprises a scraper configured to scrape hardened flux from the weld.

41. A system according to Claim 34 further comprising a pivoting mounting surface, said peeler, said straightener, said drive roller, said offsetter, and said splicing assembly mounted on said mounting surface, said mounting surface configured to be remotely pivoted to control a gap width between said first edge and said second edge.

42. A system according to Claim 34 wherein said first cutter further configured to cut the cylinder in a plane normal to the cylinder.

43. A system according to Claim 37 further comprising:

an automatic arc welder in series configuration with said seam tracker; and

a controller electrically connected with said arc welder and said seam tracker, said controller configured to receive positioning signals from said seam tracker, said controller further configured to control said arc welder.

44. A system according to Claim 34 wherein said second cutter comprises an automated plasma torch configured to traverse a path underneath the cylinder.

45. A system according to Claim 34 further comprising:

a peeler in series configuration with said drive roller, said peeler configured to prevent a coil of material from freely unwrapping; and

a straightener in series configuration with said drive roller, said straightener configured to straighten at least a portion of the material.

46. A method for jacketing a tank car utilizing a first cylinder and second cylinder, each cylinder having a longitudinal cut on a bottom portion defining a first bottom edge and a second bottom edge of each cylinder, said method comprising:

lifting the first cylinder such that the first and second bottom edges of the first cylinder separate creating a radius greater than a radius of the tank car including a layer of insulation;

positioning the first cylinder over the tank car;

lowering the first cylinder such that the first and second bottom edges of the first cylinder are free to wrap around the tank car;

lifting the second cylinder such that the first and second bottom edges of the second cylinder separate creating a radius greater than a radius of the tank car including a layer of insulation;

positioning the second cylinder over the tank car;

lowering the second cylinder such that the first and second bottom edges of the second cylinder are free to wrap around the tank car;

welding the first cylinder and the second cylinder together; and

welding the first and the second cylinder to at least one inlet nozzle and at least one tank car head.

47. A method according to Claim 46 wherein said lifting the first cylinder further comprises lifting the first cylinder with an anti-overspread beam such that the first and the second bottom edges of the first cylinder separate creating a radius greater than a radius of the tank car, said lifting the second cylinder further comprises lifting the second cylinder with an anti-overspread beam such that the first and the second bottom edges of the second cylinder separate creating a radius greater than the radius of the tank car.

48. A method according to Claim 46 further comprising:

welding the longitudinal cut on the first cylinder prior to welding the first cylinder and the second cylinder together; and

welding the longitudinal cut on the second cylinder prior to welding the first cylinder and the second cylinder together.

49. A method according to Claim 48 wherein said welding the longitudinal cut on the first cylinder further comprises welding the longitudinal cut on the first cylinder with an outer fillet weld prior to welding the first cylinder and the second cylinder together, said welding the longitudinal cut on the second cylinder

further comprises welding the longitudinal cut on the second cylinder with an outer fillet weld prior to welding the first cylinder and the second cylinder together.

50. A method according to Claim 46 wherein said positioning the first cylinder further comprises positioning the first cylinder over the tank car using a head angle, said positioning the second cylinder further comprises positioning the second cylinder the second cylinder over the tank car using a head angle.

51. A method for fabricating a roof for a hopper car utilizing a continuous weld, said method comprising:

feeding a source material including a first edge and a second edge from a coil;

offsetting at least one of the first edge and the second edge;

spiraling the material to form a cylinder;

welding the first edge and the second edge together forming a continuous weld;

cutting the cylinder to a selected length;

cutting a plurality of longitudinal cuts in the cylinder forming at least one roof for a hopper car.

52. A method according to Claim 51 wherein said offsetting further comprises offsetting at least one of the first edge and the second edge utilizing a joggle joint die.

53. A method according to Claim 51 wherein said step of spiraling the material further comprises:

monitoring a gap width between the first edge and the second edge; and

adjusting a helix angle such that the gap width is substantially uniform.

54. A method according to Claim 51 wherein said welding further comprises vacuuming loose flux from the weld.

55. A method according to Claim 51 wherein said welding further comprises:

tracking a seam utilizing a seam tracker; and

transmitting a weld location to a controller controlling an automatic submerged arc welder.

56. A method according to Claim 51 wherein said cutting the cylinder further comprises cutting the cylinder with a plasma cutter in a plane normal to the cylinder.

57. A method according to Claim 51 wherein said feeding a source material further comprises feeding a flexible source material including a first edge and a second edge from a coil, said welding further comprises welding the first edge and second edge together forming a continuous weld such that the cylinder is deformable.

58. A method according to Claim 51 wherein said cutting the cylinder further comprises cutting the cylinder longitudinally from an outside surface utilizing an automated plasma torch traversing a path underneath the cylinder.

59. A method according to Claim 51 wherein said welding further comprises welding the first edge and the second edge together forming a continuous weld by welding an inner butt weld and an outer butt weld.

60. A method according to Claim 51 further comprising:

straightening at least a portion of the source material; and

scraping hardened flux from the weld.

61. A system for forming a spiral weld roof for a hopper car using a continuous weld, said system comprising:

at least one drive roller configured to drive a material;

a splicing assembly in series configuration with said roller, said splicing assembly configured to splice a rear end of a first coil to a front end of a second coil;

an offsetter in series configuration with said drive roller, said offsetter configured to offset at least one of a first edge and a second edge of the material;

a spiral welder in series configuration with said drive roller, said spiral welder configured to spirally weld the material into a cylinder;

a cylinder fixture in series configuration with said drive roller, said cylinder fixture configured to support and transport the cylinder;

a first cutter in series configuration with said drive roller, said first cutter configured to cut the cylinder to a selected length; and

a second cutter in series configuration with said drive roller, said second cutter configured to make a plurality of longitudinal cuts in the cylinder forming at least one roof for a hopper car.

62. A system according to Claim 61 wherein said offsetter comprises a joggle joint offsetter.

63. A system according to Claim 61 wherein said splicing assembly comprises:

a plasma torch; and

a clamp welder in series configuration with said plasma torch.

64. A system according to Claim 61 wherein said spiral welder comprises a seam tracker.

65. A system according to Claim 61 wherein said spiral welder comprises a vacuum configured to vacuum loose flux from the weld.

66. A system according to Claim 61 wherein said spiral welder further comprises a scraper configured to scrape hardened flux from the weld.

67. A system according to Claim 61 further comprising a pivoting mounting surface, said peeler, said straightener, said drive roller, said offsetter, and said splicing assembly mounted on said mounting surface, said mounting surface configured to be remotely pivoted to control a gap width between said first edge and said second edge.

68. A system according to Claim 61 wherein said first cutter further configured to cut the cylinder in a plane normal to the cylinder.

69. A system according to Claim 64 further comprising:

an automatic arc welder in series configuration with said seam tracker; and

a controller electrically connected with said arc welder and said seam tracker, said controller configured to receive positioning signals from said seam tracker, said controller further configured to control said arc welder.

70. A system according to Claim 61 wherein said second cutter comprises an automated plasma torch configured to traverse a path underneath the cylinder.

71. A system according to Claim 61 wherein said spiral welder further configured to spirally weld the material into a cylinder with an inner butt weld and an outer butt weld.

72. A system according to Claim 61 further comprising:

a peeler in series configuration with said drive roller, said peeler configured to prevent a coil of material from freely unwrapping; and

a straightener in series configuration with said drive roller, said straightener configured to straighten at least a portion of the material.

73. A method for attaching a spiral welded roof on a hopper car including a plurality of bulkheads and a plurality of sidewalls, said method comprising the steps of:

positioning the roof over the bulkheads and extending over the sidewalls; and

welding the roof to the bulkheads and the sidewalls.